**Heart rate variability before and after strenuous exercise. Stressed or Zen?**

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**Methods.**— Heart rate variability, a marker of sympatho-vagal balance, was recorded twice, the nights before and after an 8 km run in full combat jacket with a 11 kg load among 61 military subjects. Spectral and temporal analysis were performed and compared with subjective anxiety and sleep scales.

**Results.**— Before the run, two profiles were identified: profile 1 was associated with subjects who mainly exhibited vagal activity during the first part of sleeping. Profile 2 was associated with subjects who mainly exhibited sympathetic activity. After the run, these two profiles were observed, without changing from profile 2 to profile 1 from one night to the next. There was no correlation with perceived anxiety.

**Discussion.**— The absence of vagal bounce after strenuous exercise among subjects with sympathetic activity before the run suggests that intrinsic factors may be present. Further studies are required to determine whether this profile is protective or not.

**Keywords:** Heart rate variability; Running; Stress; Sleep

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**Study of tolerance and fatigue during the basic training program in the French army among young recruits. Study of the impact on strength and endurance**

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**Keywords:** Basic training; French army; Overtraining syndrome; Trauma injuries; Sport; Fat mass

**Background.**— Basic training (BT) is a high risk period for the recruits in terms of trauma. Is this BT well tolerated in the French Army?

**Methods.**— It is a prospective cohort study. It took place in Gap at the “Centre de Formation Initiale Militaire”, from September 2012 until April 2013. During this period, all the recruits of this military training center were included. The incidence of overtraining syndrome (OTS) was evaluated by the French Sport Medicine Society questionnaire. This questionnaire was performed three times during the BT period. The incidence of traumas was reported and analysed during medical consultations. Anthropometric measures were made.

**Results.**— Among 155 subjects included, 5 (3%) had an overtraining syndrome; with 24 traumas occurred, so 15% of the subjects were injured. Subjects with an increase of the OTS score had a higher risk of trauma: 35% vs. 10% (P = 0.01). Subjects with a trauma had a higher initial fat mass index: 14.6% vs. 12.8% (P < 0.01).

**Discussion.**— BT in the CFIM of gap is well tolerated, compared to others studies. Monitoring of fat mass index and OTS could be interesting in terms of trauma prevention among this population.

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